

Further Despatches respecting the Bubonic Plague

GOVERNOR SIR C. BRUCE, K.C.M.G., TO THE RIGHT HON.
J. CHAMBERLAIN, M.P.

Government House
Mauritius, 14th. June

MAURITIUS.

No. 230.

Sir,

In continuation of Sir Graham Bower's despatch No. 187 of the ultimo, I have the honour to transmit, herewith, a copy of the report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 7th. May to the 13th. instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure

in despatch No. 230 dated 14th June 1901.

REPORT.

Alterations in the time table of the British India Mails have led to some delay in the despatch of the usual monthly report on plague, the period covered by the present return being in consequence longer by 10 days than that comprised in the previous reports.

Only 4 cases of plague were registered in the whole Island during that time giving a daily average of .1 against a total of 6 and a daily average of .16 for the previous 38 days and 3 cases with an average of .08 per diem in the corresponding period of 1900.

The cases are divided as follows according to the usual classification.

Nationality.	Total number of cases.	Dead.	Alive.	Remarks.
Mauritians ...	2	2	.....	.....
Indians	2	2	.....	.....
Chinese ... ..	...	...	.....	.....
Total ...	4	4	.....	.....

They all terminated fatally. The case mortality for the previous 38 days was 83 3 o/o whereas the 3 cases of the corresponding period of 1900 also proved fatal.

In 3 of the four cases under consideration the patients were seen alive. One was removed to hospital but the other two died in their own homes. The second case of the series was only discovered after death.

The Indian and Creole population have furnished an equal number of cases despite the great predominance of the former.

The Chinese have continued to remain unaffected.

During the period under review 4 contacts were accommo-

the Grand River North West and 5 at the Lower Wilhems lazarets. Seven persons were also segregated at private camp on Mont Piton Estate. Of this total of 16 convalescents 8 have been discharged in good health and the remainder still under observation.

The surviving patient referred to in my last report has been discharged after recovery.

Port Louis :— One of the four cases recorded on this occasion occurred in Port Louis. The patient was a little boy about 9 years of age who was admitted in the Civil Hospital plague pavilion with suspicious symptoms on the 14th. of May. The diagnosis was confirmed by the microscope on the following day. The exact source of infection has not been traced. No dead rats have been discovered about the premises nor was there any direct relationship between this and the previous cases in town, but the patient's residence was only about 500 feet from No. 5 Poudrière Street where a case was discovered on the 27th of April last and the case in question is probably connected with the same rat focus (please see my last report).

The town and district of Port Louis had 3 cases with 2 deaths during the previous 38 days and one fatal case in the corresponding period of 1900.

In the rural districts plague has only shown signs of existence at Plaines Wilhems and Pamplemousses.

Plaines Wilhems :— In that district a case of plague was quite recently detected at Vacoas. The patient resided in the neighbourhood of "Réunion" estate where the disease manifested itself as late as the second fortnight in April and this case may possibly be an extension of the same focus. On the other hand there is some ground for suspecting that cases of plague occurred in the same family late in 1900 and at the beginning of 1901 which were not detected at the time.

The patient might, if these suspicions be correct, have been infected from soiled clothes or other effects which may have retained infective properties. The district had 3 fatal cases during the preceding 38 days and 2 cases which likewise terminated in death in the corresponding period of 1900.

Pamplemousses :— What looks at first sight like a revival of the epidemic has taken place on Mont Piton Estate in this district. A fatal case of plague was reported from that estate on the 6th of June after an interval of 39 days and this case was closely followed by another on the 11th. There is no evidence whatever that the estate was re-infected from without but the attention of the Sanitary Authorities had already been attracted by a suspiciously high mortality among the laborers of that estate previous to the 6th of June. On the whole it seems not unlikely that plague had continued to exist in a sporadic form on the estate and that a few cases have been allowed to pass undetected by the Estate Officials in the interval between March 27th. and June 6th. last.

No case of plague was reported from this district either during the previous 38 days or in the corresponding period of 1900.

During the 38 days under review 308 rats were caught or otherwise destroyed by the gang of ratcatchers in Port Louis against 204 in the preceding 38 days.

L. G. BARBEAU,

14th, June, 1901.

Acting Sanitary Warden.

Comparative statement showing the number of Plague cases discovered from the 7th. May to the 13th June 1901 (inclusive)

Districts.	1901.				1900-1901.			
	No. of cases of plague and case mortality.				No. of cases of plague and case mortality.			
	For 38 days ended 6.5.1901.		For 38 days ended 13.6.1901.		For 38 days ended 13.6.1900.		For 38 days ended 13.6.1901.	
	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.
Port Louis ...	3	67 0/10	1	100 0/10	1	100 0/10	1	100 0/10
Pl. Wilhems...	2	100 0/10	1	100 0/10	2	100 0/10	1	100 0/10
Pamplemousses. ...	...	...	2	100 0/10	...	...	2	100 0/10

L. G. BARBEAU,
Acting Sanitary Warden.

14th. June, 1901.

GOVERNOR SIR C. BRUCE, K.C.M.G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

Mauritius.

No. 263.

Sir,

In continuation of my despatch No. 230 of the 14th. June ultimo, I have the honour to transmit, herewith, a copy of the report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 14th. June to the 11th. instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure
in despatch No. 263 dated 12th. July 1901.

REPORT.

Four cases of plague were discovered during the four weeks ended the 11th. instant against three cases during the previous

...eight days and one case in the corresponding period of
 As shown in the following table the patients were all
 ians.

Nationality.			Total No. of cases.	Dead.	Alive.	Remarks.
Mauritians	...	...	...	...	...	...
Indians	...	...	4	3	1	...
Chinese	...	...	...	...	...	...
Total...	...	...	4	3	1	...

Three of these cases terminated fatally giving a case mortality of 75 o/o. The death-rate was 100 o/o both during the previous four weeks and in the corresponding period of 1900. The surviving patient is convalescent. Of these four cases one was recognised postmortem.

Plague is now confined to Pamplémousses, Port Louis and the other rural districts being free from the disease.

The four cases recorded on this occasion all occurred in the camp of Mount Piton Estate which is the only plague focus at present in existence in the Colony.

It has not been possible to trace any direct relationship between these cases with the exception that the last two patients were members of the same family and occupied the same rooms. No dead rats have as yet been discovered about the camp. The only carcasses found have been those of two dogs which could not be bacteriologically examined. Of the cases seen alive one has been removed to hospital and is recovering, the other two died in the camp. Twenty-four contacts were isolated in connection with these cases in the Estate segregation camp, all of whom submitted to preventive yersinisation and have been discharged in good health. An attempt to yersinise the occupiers of the camp on a large scale has failed owing to the opposition of the laborers.

In view of the persistence of plague on that estate much attention is given both by the Sanitary Department and the Estate Officials to the sanitation of the camp and every hut is being disinfected as far as practicable under the circumstances. The difficulty of carrying out such a measure in Indian huts to any reasonable degree of thoroughness being fully recognised, however steps are being taken for the complete evacuation of the infected camp.

Pamplémousses district had 2 cases of plague during the preceding four weeks but none during the corresponding period of 1900. The accompanying table shows the distribution of plague cases in the Island during the three periods under comparison.

During the time covered by this report 240 rats were caught or otherwise destroyed by the gang of ratcatchers in Port Louis against 246 in the previous 28 days.

L. G. BARBEAU,

Acting Sanitary Warden.

Comparative statement showing the number of Plague cases discovered from the 14th. June to the 11th. July 1901 (inclusively).

Districts.	1901.				1900-1901.			
	Number of plague cases and case mortality.				Number of plague cases and case mortality.			
	For 28 days ended 13.6.01.		For 28 days ended 11.7.01.		For 28 days ended 11.7.00.		For 28 days ended 11.7.01.	
	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.	No. of cases.	Percentage of deaths.
Port Louis ...	...	...	...	...	1	100 o/o	...	...
Pl. Wilhems...	1	100 o/o	...	..	...	...	...	...
Pamplemousses.	2	100 o/o	4	75 o/o	...	...	4	75 o/o

12th. July, 1901.

L. G. BARBEAU,

Acting Sanitary Warden.

GOVERNOR SIR C. BRUCE, G.C.M.G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

Mauritius.

No. 295.

Sir,

Government House,
Mauritius, 12th. August, 1901.

In continuation of my despatch No. 263 of the 12th. July last, I have the honour to transmit, herewith, a copy of a report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 12th. July last to the 9th. August instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure

in despatch No. 295 dated 12th. August, 1901.

REPORT.

The plague returns for the last 29 days only show two cases of the disease in the whole Island against four during the previous 29 days and 16 for the corresponding period of 1900.

The patients, both of whom succumbed, were Indians. The case mortality from plague was 75 o/o during the preceding 29 days and 81 o/o in the corresponding period of 1900.

Both cases were seen before death and treated by the Medical Attendants of the estates on which they occurred.

Pamplemousses and Rivière du Rempart are the only districts where plague has shown any sign of existence—Port Louis and the other rural districts having remained free from infection.

The annexed tables show the distribution of the disease during the time covered by this report as compared with the previous 29 days and the corresponding period of 1900.

During the period under review 14 contacts were isolated in the Segregation camps of Belle Vue (Maurel) and Mont Piton Estates, all of whom submitted to preventive yersinisation and have since been discharged in good health.

Pamplemousses. — A fresh case has been registered on Mont Piton Estate in a camp which had hitherto remained unaffected. The patient was, however, a former resident of the infected camp who had recently removed to the hut in which she fell ill as a consequence of the evacuation of that camp. It is suspected that soiled clothes which may have escaped disinfection in spite of the vigilance of the Sanitary Officers and Estate Officials were possibly the vehicles of infection in this case.

A few dead rats were found in the camp shortly after the discovery of the cases recorded on the 6th. of July.

This district had 4 cases of plague with 3 deaths during the previous 29 days but none in the corresponding period of 1900.

Rivière du Rempart. — An isolated case has been detected on Belle Vue (Maurel) Estate in that district. The patient, an Indian woman, died in hospital.

Up to now no clue has been obtained regarding the source of contamination.

It is possible that the deceased may have visited Mont Piton Estate before she was attacked or that she may have been in contact with people or effects from that estate which is distant about five miles from Belle Vue (M); but no evidence is obtainable in support of this view. No dead rats are reported to have been discovered about the infected camp and none have been found by the Sanitary Officers.

Energetic measures having been adopted at once by burning down all the huts exposed to contamination as well as the clothes and effects they contained, the disease has made no headway on the estate since July 18th.

Rivière du Rempart district was free from plague both during the previous 29 days and in the corresponding period of 1900.

During the time covered by this report 176 rats were destroyed by the ratcatchers of the Department.

L. G. BARBEAU,

Acting Sanitary Warden.

10th. August, 1901.

*Comparative statement of Plague cases discovered in the Colony
from July 12th. to August 9th. 1900-1901.*

Districts.	1901.				1900-1901.			
	No. of cases of plague and case mortality.				No. of cases of plague and case mortality.			
	For 29 days ended 11.7.01.		For 29 days ended 9.8.01.		For 29 days ended 9.8.00.		For 29 days ended 9.8.01.	
	No. of cases.	Percentage mortality.	No. of cases.	Percentage mortality.	No. of cases.	Percentage mortality.	No. of cases.	Percentage mortality.
Port Louis	15	80 o/o	...	...
Pamplemousses ...	4	75 o/o	1	100 o/o	...	...	1	100 o/o
R. du Rempart	1	100 o/o	...	...	1	100 o/o
Flacq
Grand Port
Savanne
Pl. Wilhems	1	100 o/o	...	...
Moka
Black River

L. G. BARBEAU,

Acting Sanitary Warden.

10th August 1901.

GOVERNOR SIR C. BRUCE, G.C.M.G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

Mauritius.

No. 333.

Sir,

In continuation of my despatch No. 295 of the 12th. August last, I have honour to transmit, herewith, a copy of a report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 10th. August last to the 5th. September instant.

I have, &c.,

CHAS. BRUCE,
Governor.

—

Enclosure
in despatch No. 333 dated 6th. September 1901.

REPORT.

As was apprehended plague has shown a tendency to increase since the date of my last report. The returns for the last 27 days show 11 cases or an average of $\cdot 4$ per diem against 2 for the previous 27 days and 25 with a daily average of $\cdot 9$ during the corresponding period of 1900.

As shown in the following table the patients with two exceptions were Indians and of these 8 were Madrassee Hindoos.

Nationality.		Total No. of cases.	Dead.	Alive.	Remarks.
Mauritians {	White	...	...	...	.....
	Non-white	2	1	1	.....
Indians	...	9	7	2	.....
Chinese	...	...	...	...	.....
Total		11	8	3	.....

The death-rate among those attacked has been 73 o/o. It was 100 o/o during the preceding 27 days and 74 o/o in the corresponding period of 1900.

One of the annexed tables shows the distribution of the plague attacks and the case mortality in the Island during the three periods under comparison. It will be seen that during the 27 days covered by this report the disease has been confined to Port Louis which had been clear of plague in epidemic form since the month of January 1901, only a few dropping cases being observed in the following months and until the 15th of May after which no case was reported until the 21st of August last.

It may be remembered that the disease re-appeared in epidemic form in the City towards the end of July 1900 after a period of complete quiescence extending over nearly five months.

The first case of the present series was discovered about a fortnight ago at the Civil Hospital where the man had been admitted suffering from fever.

He was in a stupefied condition when the disease was recognised and upon enquiry it was found that he had given a false address on admission. No clue has since been obtained as to his residence.

About the same time reports were received at the Sanitary Office that dead rats were being seen about town and some were found in Touraine Street.

A few days later two cases of plague were detected in that street (the patients being husband and wife) which were rapidly followed by two others in the same family. Other cases now came in in quick succession but without any tendency to arrange themselves around a distinct focus. Dead rats having been found either on or in the neighbourhood of the infected premises in Touraine, Rémy Ollier, Royal and La Paix Streets, it seems probable that the disease was in nearly all if not in all these cases, contracted on the spot.

Rats are unfortunately also dying in the houses along the Place d'Armes and the grain stores in Church street and it is to be feared that a number of attacks will before long be traced to infection acquired from that quarter.

There is no evidence that the infection was re-imported from without and we seem to be confronted with

the perennial return of the disease with which the history of the plague epidemics at Hong-Kong and in India has now made us familiar. The starting point is apparently the same as in 1900, namely : the go-downs and stores of all kinds in the centre of the town which are the favourite haunts of rats. Some of these places have never been disinfected but, even if they had, it is admissible that infective germs may remain dormant in rat burrows where they are not reached by the disinfectants and where they are taken up again by rats under favourable conditions.

Of the 11 cases recorded on this occasion, 5 were seen alive of whom 3 were treated at Bois Savon Hospital with one death ; another proved fatal at the Civil Hospital, while the fifth which is being treated at the patient's own residence is improving.

The remaining six cases were seen postmortem and the diagnosis was confirmed in every instance by a microscopical examination of the juice of the buboes.

During the period under review 19 contacts were segregated at Bois Savon camp 2 of whom developed plague in the camp within 5 days of their admission. Nine contacts were isolated on their own premises of whom five are still segregated.

Of the 7 premises attacked three had already been visited by the disease in previous epidemics and one of them (76 Royal Street) was attacked both in 1899 and in 1900.

In the course of the last 27 days 238 rats were destroyed by the gang of ratcatchers employed by the Sanitary Department.

L. G. BARBEAU,

Acting Sanitary Warden.

6th. September, 1901.

Comparative statement of Plague cases discovered in the Colony from 10th. August to 5th. September 1900-1901, also from 14th. July to 9th. August 1901.

Districts.	No. of cases of plague and case mortality.				No. of cases of plague and case mortality.			
	For 27 days ended 9.8.01.		For 27 days ended 5.9.01.		For 27 days ended 5.9.00.		For 27 days ended 5.9.01.	
	No. of cases.	Perct. mortality.	No. of cases.	Perct. mortality.	No. of cases.	Perct. mortality.	No. of cases.	Perct. mortality.
Port Louis ...	...	...	11	73 0/10	23	74 0/10	11	73 0/10
Pamplemousses ...	1	100 0/10	...	...	...	...	...	...
Rivière du Rempart ...	1	100 0/10	...	...	1	100 0/10	...	...
Flacq ...	...	...	...	...	...	...	...	...
Grand Port ...	...	...	...	...	...	...	...	...
Savanne ...	...	...	...	...	...	...	...	...
Pl. Wilhems ...	...	...	...	...	1	100 0/10	...	...
Moka ...	...	...	...	...	...	...	...	...
Black River ...	...	...	...	...	...	...	...	...

L. G. BARBEAU,

Acting Sanitary Warden.

6th. September, 1901.

GOVERNOR SIR C. BRUCE, G.C.M.G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

Mauritius.

No. 370.

Government House,
Mauritius, 5th. October, 1901.

Sir,

In continuation of my despatch No. 333 of the 6th. September last, I have the honour to transmit, herewith, a copy of a report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 6th. September last to the 3rd. October instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure

in despatch No. 370 dated 5th. October 1901.

REPORT.

The plague has made rapid progress in the Island since the date of my last monthly report. The number of registered cases has risen to 123 or an average of 4.4 per diem against 11 cases during the previous 28 days and 97 in the corresponding period of 1900 with a daily average of .4 and 3.5 respectively.

The attacks are divided as follows in accordance with the adopted classification.

Nationality.	Total No. of cases.	Dead.	Alive.	Remarks.
Mauritians { White ...	1	...	1	...
{ Non-white	18	15	3	...
Indians 	96	68	28	...
Chinese 	8	8	...	...
Total 	123	91	32	...

Little change has taken place in the mortality which has been 74 o/o.

It was 73 o/o during the previous four weeks and 77.3 o/o in the corresponding period of 1900.

The incidence has been heaviest on the Indian population and among these the Madrassee Hindoos have suffered most. The same remark was made about this time last year and the same causes seem to be still at work, viz : the filthy habits of these people coupled with the nature of their avocations, most of the victims being laborers working in the grain and gunny stores where rats abound.

The disease is now no longer confined to Port Louis as cases have been discovered in several rural districts.

In fact there are at the present day three distinct foci in existence, viz : Town, Beau Bassin and Beau Séjour Estate, Rivière du Rempart.

Port Louis :—The epidemic has been practically confined as

yet to the centre of the town. As mentioned in my last report dead rats have been discovered in many of the streets of that area and human plague has rapidly followed in the train. The streets most affected being David, Royal, Prince Régent, Little and New Little Mountain Streets, Rampe and Rémy Ollier Streets.

A smart outbreak has also quite recently been observed in the camps of the Albion and New Mauritius Docks at Caudan. Part of these camps has been evacuated as well as the camp of the former Company in David street where the disease has also made its appearance with much virulence, the laborers and their families being accommodated at the Government Camp in Nicolay Road which is now full. Most of these people have submitted to preventive injection with Yersin's serum which is also occasionally resorted to by persons of the upper classes who have been exposed to infection.

Naturally enough it might be assumed that in the initial cases among the dockers, the infection was contracted at their work. This does not however appear to be the case as men, women and children were attacked simultaneously and dead rats were discovered in many of the rooms when the camps were disinfected by the Sanitary Officers.

For the accommodation of the town patients and contacts, the lazaret at Bois Savon has been set in working order again under the supervision of Dr. Keisler and the similar establishment at Grand River is also ready for the reception of inmates.

Plaines Wilhems :—Cases have been observed in different parts of this district, many of which could be traced to infection acquired at Port Louis. An indigenous focus has shown itself at Beau Passin, however, where the primary source of the infection seems to have been the carcasses of dead cats and rats which had apparently been dead for several months and which were discovered upon disinfection in a house contiguous to, and in direct communication with, that occupied by the first two patients. At the same time a rat which had only recently died was found on the premises where the patients resided.

A similar occurrence was observed in Port Louis last year.

Rivière du Rempart :—In this district Beau Séjour Estate has again been attacked.

That estate was, as it will no doubt be remembered, the scene of a violent outbreak about the same time last year and the progress of the disease could only be stayed pending the evacuation of the camp by wholesale yersinisation of the laborers.

The old camp was burnt down and a new one constructed at considerable expense, on a different site. This camp is the one attacked at present. The usual measures are being adopted but taught by their previous experience the inmates have willingly submitted in large numbers to the injection of Yersin's serum as a preventive.

In this instance there is no evidence of a fresh introduction of the virus. The epidemic seems to be due to a reviviscence of the germs of the former outbreak. The highly volcanic nature of the soil in that part of the country renders it a very favourable breeding place for rats and it is admissible that the virus may have remained dormant for some time in the rat runs and crevices of the ground which would afford sufficient protection from the action of light and oxygen.

In support of this view I may mention that no dead rats have been found in the estate grain store whereas several carcasses have been discovered in the camp.

Flacq :—A case of plague has been discovered at Bon Accueil

in this district. It seems to have been the third of a series. The primary source of infection has remained obscure but is possibly Port Louis.

Grand Port, Pamplemousses and Savanne:—A case of plague has been reported from each of these districts, the patients in the three cases coming from Port Louis.

The Savanne and Pamplemousses cases have terminated fatally but the Grand Port patient is being treated at the Mahebourg lazaret.

The annexed tables show the distribution of plague cases and the mortality during comparative periods of 1899, 1900 and 1901 and during two successive periods of 1901.

Of the 123 cases recorded on this occasion 69 were recognised postmortem.

Of the patients seen alive 50 were removed to hospital with 26 deaths and 4 were treated at home of whom 2 died.

During the period under review 138 contacts were accommodated at Bois Savon of whom 4 developed plague in the camp.

During the same period 272 rats were caught or otherwise destroyed by the ratcatchers of the Sanitary Department.

Of the 60 premises attacked 16 had already been visited by plague on previous occasions.

Considered in its "ensemble" the present epidemic differs from the previous ones by the suddenness of the outbreak and the rapid increase in the number of cases.

There is also a greater proportion than before of primary plague pneumonias and of cases without buboes in which the diagnosis has been confirmed by a bacteriological examination.

In the light of the experience of Oporto the treatment by intravenous injection of Yersin's serum recommended by Calmette and Sahnbani is being tried both in the public hospitals and in private practice but as yet the figures are not large enough to permit of any conclusions being drawn therefrom. The result may however be said to be encouraging.

L. G. BARBEAU,
Acting Sanitary Warden.

October, 4th. 1901.

Comparative statement showing the number of Plague cases and case mortality for the 4 weeks ended 5th. September and 3rd. October 1901.

4 weeks ended 5.9.01 — 4 weeks ended 3.10.01.

Districts.	No. of cases.	No. of deaths.	Perc.	No. of cases.	No. of deaths.	Perc.
Port Louis ...	11	8	73	101	74	73 o/o
Pamplemousses	1	1	100 o/o
Riv. du Rempart...	5	3	60 o/o
Flacq	1	1	100 o/o
Grand Port	1	...	...
Savanne	1	1	100 o/o
Plaines Wilhems...	13	11	84 o/o
Moka
Black River
Total ...	11	8	73	123	91	74 o/o

*Comparative statement showing the number
of Plague cases and case mortality from 6th. September to 3rd.
October 1899-1900-1901.*

Districts.	1899.			1900.			1901.		
	No. of cases.	No. of deaths.	Percent.	No. of cases.	No. of deaths.	Percent.	No. of cases.	No. of deaths.	Percent.
Port Louis ...	204	166	81 o/o	70	53	76 o/o	101	74	73 o/o
Pample-mousses...	12	10	83 o/o	...	...	...	1	1	100 o/o
Rivière du Rempart...	12	7	60 o/o	21	17	81 o/o	5	3	60 o/o
Flacq ...	...	...	...	4	3	75 o/o	1	1	100 o/o
Grand Port.	1	1	100 o/o	...	...	...	1	...	...
Savanne ...	16	14	87 o/o	...	...	...	1	1	100 o/o
Plaines									
Wilhems..	18	14	78 o/o	2	2	100 o/o	13	11	84 o/o
Moka ...	1	1	100 o/o	...	...	...	...	...	...
Black River.	1	1	100 o/o	...	...	...	...	...	...
Total ...	265	214	81 o/o	97	75	77 o/o	123	91	74 o/o

GOVERNOR SIR C. BRUCE, G. C. M. G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

MAURITIUS.

No. 425. Sir,

Government House,
Mauritius, 8th. November, 1901.

In continuation of my despatch No. 370 of the 5th October last, I have the honour to transmit, herewith, a copy of a report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 4th October last to the 6th. November instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure
in despatch No. 425 dated 8th November 1901.

REPORT.

A further and marked increase has taken place in the plague epidemic since the date of my last report.

The figures for the last 34 days are 334 cases or an average of 9.8 daily against 125 cases and a daily average of 3.6 during the previous 34 days and 228 cases and an average of 6.7 per diem during the corresponding period of 1900.

The annexed tables show the number of plague cases and the distribution, as well as the fatality, of the disease during corresponding periods of 1899, 1900 and 1901 and during two successive series of 34 days in 1901.

The seizures for the time covered by this report are divided as follows :—

Nationality.				No. of cases.	Dead.	Alive.
Mauritians	{ White	...	...	6	1	5
	{ Non-white	...	...	76	58	18
Indians	...	...	...	229	144	85
Chinese	...	...	...	23	19	4
Total				334	222	112

The case mortality has been 66.5 o/o against 74.4 o/o during the previous 34 days and 74.1 o/o in the corresponding period of 1900.

The incidence has been particularly heavy on the Indian population but the Mauritians have also furnished a large number of cases including a few Whites.

The Chinese population has also suffered rather severely, 23 attacks having taken place among them.

Out of the total of 334 cases 122 were only discovered postmortem. Of the remainder 184 were removed to hospital of whom 80 died and 28 were treated at home with 20 deaths.

The disease has been mostly confined to Port Louis, several of the cases discovered in the rural districts having been traced to infection from that source.

Port Louis :—The disease has made rapid strides in town, the cases being scattered all over the City. Plague is most prevalent, however, in the Central area in which by far the larger number of the cases have occurred.

The discovery of dead rats is still being reported from various parts of the City so that there is little hope of an immediate abatement of the epidemic.

Plaines Wilhems :—Plague continues in a more or less sporadic form at Beau Bassin where 13 cases have occurred out of a total of 17 for the whole district of Plaines Wilhems. In this locality also an unusual mortality on rats has been observed concurrently with the existence of human plague.

Two fatal cases have occurred at Vacoas one of which came from Beau Bassin and one case at Curepipe where the source of infection has remained obscure.

Moka-Savanne :—A case was discovered in each of these districts coming from town. A heavy mortality on rats is reported on Côte d'Or Estate at Moka. The laborers exposed to infection have been yersinised and energetic measures adopted with a view to avoid an epidemic.

Grand Port :—Three cases were found on Riche-en-Eau Estate also derived from Port Louis. The patients were removed to Mahebourg plague hospital where one of them died.

Pamplemousses :—In addition to a few isolated cases imported from town, one apparently indigenous case has been observed in this district, the patient being a laborer of the " Mount " Estate.

Flacq :—A distinct plague focus has shown itself in the village of Centre of Flacq which has already given six cases. The disease broke out in a lodging house in close proximity to

a grocer's shop. Rats were about the same time found to be dying in the neighbourhood.

The lodging house first affected is also in close proximity to a hut occupied by a plague patient discovered on the 4th of October last and who was believed to have acquired the disease at Plaines Wilhems.

The hut was disinfected immediately the affection was recognised but the rats had possibly become infected in the meantime.

However that may be plague seems to have taken a certain hold of the village and among those attacked is the Dipenser-steward of the local plague lazaret.

Seven of the patients found alive were removed to the Flacq Plague hospital of whom 3 have died.

Rivière du Rempart :—The wholesale injection of Yersin's serum as a preventive to the laborers, employés, &c., of Beau Séjour has had the usual effect of temporarily checking the progress of the epidemic.

As the protective influence of the prophylactic began to wear away, however, the disease re-appeared in the camp of that estate but up to date it seems to have been kept within bounds. Unfortunately dead rats are still to be found in the camp and its vicinity.

Following upon the discovery of dead rats in the estate grain store plague has broken out among the laborers of *St. Antoine* Estate despite immediate disinfection of the store and yersinisation of those working in it or engaged in its disinfection. The Manager is active'y taking steps for the evacuation of the camp.

An unusual mortality on rats is also reported from *Réunion* (Maurel) in the same district and although immediate measures are being taken it is to be feared that human plague will not be long in making its appearance there also.

As already mentioned in my last report, Yersin's serum has been and is still largely used as a curative in the form of intravenous injections. The results in the Public hospitals have up to date been favourable to this method of treatment which is reported on the other hand to have failed in the hands of a few private practitioners.

During the period under review 492 contacts were segregated in the Government Segregation camps of whom 387 have been released in good health — 68 contacts of whom 55 have been discharged were segregated on sugar estates and 103 by private effort of whom 63 have been released.

Twenty-five contacts developed plague in segregation.

During the same period of time 424 rats were destroyed by the ratgang and poison has also been distributed both in town and at Rose Hill and Beau Bassin by men belonging to the Sanitary Department.

L. G. BARBEAU,

7th. November, 1901.

Acting Sanitary Warden.

*Comparative statement of Plague cases discovered
in the Colony from October 4th. to November 6th. (inclusively)
1899—1900 and 1901.*

Districts.	1899.			1900.			1901.		
	No. of cases.	No. of deaths.	Case mortality.	No. of cases.	No. of deaths.	Case mortality.	No. of cases.	No. of deaths.	Case mortality.
Port Louis ...	189	150	79.4	104	77	74.	287	201	70.
Pamplemousses	62	53	85.5	31	24	77.4	1	...	...
Riv : du Rem- part ...	83	57	68.7	72	50	69.4	21	10	47.6
Flacq...	...	...	...	4	2	50.	8	4	50.
Grand Port ...	2	1	50.	5	5	100.	...	...	...
Savanne ...	24	18	75.	1	1	100.	...	...	...
Plaines Wil- hems ...	42	29	69.	8	7	87.5	17	7	41.2
Black River ...	3	3	100.	3	3	100.	...	...	...
Moka ...	...	...	...	...	...	...	...	...	...
Totals...	405	311	76.8	228	169	74.1	334	222	66.5

7th, November, 1901.

L. G. BARBEAU,
Acting Sanitary Warden.

*Comparative statement of Plague cases discovered in the Colony
from October 4th. to November 6th. 1901 and during
the previous 34 days.*

Districts.	Period of 34 days ended 3rd. October 1901.			Period of 34 days ended 6th. November 1901.		
	No. of cases.	No. of deaths.	Case mortality percent	No. of cases.	No. of deaths.	Case mortality percent.
Port Louis ...	103	76	73.8	287	201	70.
Pamplemousses	1	1	100.	1	...	...
R. du Rempart.	5	3	60.	21	10	47.6
Flacq ..	1	1	100.	8	4	50.
Grand Port ...	1	...	..	...	...	...
Savanne ...	1	1	100.	...	...	...
Pl. Wilhems ...	13	11	84.	17	7	41.2
Black River ...	...	...	...	...	...	...
Moka ...	...	...	...	...	...	...
Totals...	125	93	74.4	334	222	66.5

7th. November, 1901.

L. G. BARBEAU,
Acting Sanitary Warden.

GOVERNOR SIR C. BRUCE, G. C. M. G., TO THE RIGHT HONORABLE
J. CHAMBERLAIN, M.P.

MAURITIUS.

Government House,
Mauritius, 14th. December, 1901.

No. 476.

Sir,

In continuation of my despatch No. 425 of the 8th November last, I have the honour to transmit, herewith, a copy of a report of the Acting Plague Authority, Dr. Barbeau, on the progress of plague from the 7th November last to the 10th December instant.

I have, &c.,

CHAS. BRUCE,
Governor.

Enclosure

in despatch No. 476 dated 14th December 1901.

REPORT.

The returns for the 34 days ended the 10th. instant show a welcome decline in the plague epidemic. The total number of cases is not, however, very much lower than that recorded on the last occasion, being 309 with a daily average of 9.1 against 334 and a daily average of 9.8 during the previous 34 days, but a slackening of the epidemic has manifested itself since the first days of December.

The annexed tables show the number of plague cases and the distribution, as well as the fatality, of the disease during corresponding periods of 1899, 1900 and 1901 and during two successive series of 34 days in 1901.

The seizures for the time covered by this report are divided as follows :

Nationality.		No. of cases.	Dead.	Alive.	Remarks.
Mauritians	{ White ...	3	1	2	.....
	{ Non-white ...	115	85	30	.....
Indians	... ..	181	128	53	.....
Chinese	... ..	10	8	2	.....
Total		309	222	87	.....

The case mortality has risen from 66.5 to 71.8 %. It was 76.4 and 73.8 % during the corresponding periods of 1899 and 1900.

The incidence has been proportionately very high on the Mauritians but a marked fall has taken place in the figures for the Chinese community which has only had 10 cases against 23 recorded in my last report.

Of the 309 registered cases 118 were only discovered postmortem; 128 were treated in the Government Plague hospitals, 43 on private premises and 20 in Estate hospitals.

During the same period of time 435 contacts were segregated in the Government camps of whom 15 developed plague in segregation, 66 on private premises and 81 in Estate lazarets of whom 4 and 1 respectively developed plague.

Fifty-five patients were discharged cured from the various hospitals.

The distribution of the disease in the Island has remained practically the same, by far the largest number of cases having occurred at, or have been traced to, Port Louis. In point of fact plague has gained little ground in the rural districts since my last report, the only new indigenous focus being "Mont Piton" Estate in the district of Pamplémousses.

Port Louis :—A slight abatement has taken place in the town. The decline has been more marked in the Central area, the plague wave showing a tendency to move towards the Eastern Suburb. Very few cases as yet in the Western Suburb.

Less mortality on rats reported. In a few instances the disease has shown great infectivity. Several rooms on the same premises were attacked simultaneously or in succession, the epidemic being only stayed by evacuation.

Apart from some overcrowding there was no appreciable difference in the sanitary condition of the houses thus singled out and that of the neighbouring ones which were either not visited at all or only very lightly.

Plaines Wilhems :—The state of things in this district has remained practically unchanged. The disease continues in a sporadic form specially at Vacoas and in the township of Beau Bassin.

In one case found at Curepipe the infection was traced to Port Louis but no such clue could be found in connection with a case at Phoenix. Rats are still reported to be dying at Rose Hill and Beau Bassin.

Moka :—The measures of disinfection carried out at Côte d'Or Estate seem to have successfully warded off an epidemic from that estate.

Grand Port :—The two patients who were under treatment at the Mahebourg Plague lazaret have been discharged cured.

Savanne :—Two fatal cases were discovered near Chamourin in that district, coming from Port-Louis.

Flacq :—This district has had six cases five of which are connected with local foci. One of the cases found at Bon Accueil hamlet occupied a house in close proximity to the premises where a case of plague and dead rats were discovered on September 25th. last.

It is probable that the Dispenser-steward of the local lazaret was contaminated outside that establishment and before he took charge of it.

Rivière du Rempart :—The number of cases in this district rose from 21 on the last occasion to 28 with 16 deaths. Among the places attacked, St. Antoine Estate heads the list with 15 cases. An abatement has, however, taken place on that estate consequent on the evacuation of the infected camp.

"Beau Séjour" comes next with twelve cases. One case at Grand Gaube hamlet was found to have been contaminated in Port Louis.

"Réunion" Estate (Mauré) has as yet remained free from the disease.

Pamplémousses :—A fresh outbreak has taken place on "Mont Piton" Estate giving four cases. It is not easy to determine whether the infection has again been introduced from "Beau Séjour" or whether the outbreak is due to a reviviscence of old germs.

The same difficulty exists in regard to a case discovered on "Mon Choix" Estate which forms part of "Beau Séjour," but dead rats having been found in "Mon Choix" camp, fresh cases may be apprehended from that quarter.

Black River district has remained free.

During the period covered by this report 486 rats were destroyed by the ratcatchers of the Sanitary Department.

L. G. BARBEAU,

Acting Sanitary Warden.

13th. December, 1901.

Comparative statement showing the number of Plague cases and the case mortality for 34 days ended 10th. December, 1899-1900-1901.

Districts.	1899.			1900.			1901.		
	No. of cases.	No. of deaths.	Case mortality per c/o.	No. of cases.	No. of deaths.	Case mortality per c/o.	No. of cases.	No. of deaths.	Case mortality per c/o.
Port Louis	93	67	72.	111	88	79.3	249	192	77.1
Pamplemousses ...	16	11	69.	29	19	65.5	9	6	66.6
Rivière du Rempart	39	33	84.6	33	20	60.6	28	16	57.2
Flacq	2	1	50.	4	3	75.	5	1	20.
Grand Port ... ..	...	...	...	4	2	50.	...	...	...
Savanne	17	15	88.2	...	...	...	...	...	...
Plaines Wilhems...	65	51	78.5	13	11	84.6	18	7	38.9
Black River ... ..	...	...	...	...	...	...	...	...	...
Moka	1	...	...	1	1	100	...	...	...
Total	233	178	76.4	195	144	73.8	309	222	71.8

L. G. BARBEAU,

13th. December, 1901.

Acting Sanitary Warden.

Comperative statement showing the number of Plague cases and case mortality for 34 days ended 10th. December 1901 and for the previous 34 days.

Districts.	34 days ended 6.11. 1901.			34 days ended 10.12. 1901.		
	No. of cases.	No. of deaths	Case mortality %	No. of cases.	No. of deaths.	Case mortality %
Port Louis	287	201	69.5	249	192	77.1
Pamplemousses ...	1	...	...	9	6	66.6
Rivière du Rempart	21	10	47.6	28	16	57.2
Flacq	8	4	50.	5	1	20.
Grand Port ... ..	...	...	...	...	...	...
Savanne ... ..	...	...	...	...	...	...
Plaines Wilhems ...	17	7	41.8	18	7	38.9
Black River ... ..	...	...	...	...	...	...
Moka ... ..	...	...	...	...	...	...
Total ..	334	222	66.5	309	222	71.8

L. G. BARBEAU,

13th. December, 1901.

Acting Sanitary Warden.

